

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (currently amended) A medical device for slidable use with a guidewire, the guidewire having a first diameter and a distal stop having a second diameter greater than the first diameter, the medical device comprising:

an elongate tubular member having a proximal end and a distal end with a guide wire receiving lumen extending therethrough, a distal portion of the guidewire lumen having an inner diameter of substantially the same magnitude as the first diameter; and

a tip defining an annular wall disposed at the distal end of the elongate tubular member, the tip having a first portion having a distal taper and a radially inextensible ring distal of the first portion, wherein the annular wall of the tip has a thickness that decreases distally along a majority of the length of the tip and wherein the tip is configured to deform when the radially inextensible ring contacts the distal stop.

2. (previously presented) The medical device of claim 1, further comprising a therapeutic device disposed on a distal portion of the elongate tubular member, the tip disposed distal of the therapeutic device.

3. (withdrawn) The medical device of claim 2, further comprising a second portion distal the ring, the second portion tapering distally more sharply than the first portion.

4. (original) The medical device of claim 1, wherein the first portion is softer and more flexible than a proximal portion of the medical device.

5. (original) The medical device of claim 1, wherein the ring is the distalmost portion of the tip.

6. (original) The medical device of claim 1, wherein the medical device is an angioplasty device.

7. (original) The medical device of claim 1, wherein the medical device is an intravascular filter.

8. (original) The medical device of claim 1, wherein the medical device is an intravascular guide catheter.

9. (previously presented) A medical device for slidable use with a guidewire, the guidewire having a first diameter and a distal stop having a second diameter greater than the first diameter, the medical device comprising:

an elongate tubular member having a proximal end and a distal end with a guide wire receiving lumen extending therethrough, a distal portion of the guidewire lumen having an inner diameter of substantially the same magnitude as the first diameter; and

a tip disposed at the distal end of the elongate tubular member and having a distal end, a proximal end and a lumen therethrough, the tip having an elastic portion and a radially inextensible distal portion distal of the elastic portion;

wherein the tip comprises an amorphous polymer and the radially inextensible distal portion comprises a locally crystalline section thereof.

10. (previously presented) The medical device of claim 9, wherein the radially inextensible distal portion is an extremity.

11. (original) The medical device of claim 10, wherein the extremity is a distalmost extremity.

12. (previously presented) The medical device of claim 9, wherein the radially inextensible distal portion comprises a ring having a lumen therethrough.

13-15. (cancelled)

16. (previously presented) The medical device of claim 9, wherein the radially inextensible distal portion is machined.

17. (previously presented) The medical device of claim 9, wherein the radially inextensible distal portion is formed by deposition.

18. (cancelled)

19. (previously presented) The medical device of claim 9, wherein the radially inextensible distal portion comprises a non-compliant plastic band.

20. (previously presented) The medical device of claim 9, wherein the tip further comprises a flexible portion proximate the radially inextensible distal portion.

21. (previously presented) The medical device of claim 20, wherein the radially inextensible distal portion is a distalmost extremity and wherein the flexible portion is proximal of the radially inextensible distal portion, wherein the flexible portion tapers from a first outer diameter at a first location along the tip to a second outer diameter less than the first outer diameter at a second location along the tip distal of the first location.

22. (previously presented) The medical device of claim 21, wherein at the first location along the tip, the tip has a first thickness and a first inner diameter, and wherein at the second location along the tip distal of the first location, the tip has a second thickness less than the first thickness and a second inner diameter greater than the first inner diameter.

23. (original) The medical device of claim 22, wherein the flexible portion comprises an inner surface concave in a first plane normal to a longitudinal axis and a second plane normal to the first plane.

24. (withdrawn) The medical device of claim 20, wherein the flexible portion comprises a tube that has a first portion extending distally and an inner surface, and a second portion extending proximally from the first portion within the inner surface of the first portion, the distal portion proximate the proximalmost end of the second portion.

25. (currently amended) A medical device, comprising:
an elongate catheter having a proximal end, a distal end, and a lumen extending therethrough; and

a tip defining an annular wall disposed at the distal end of the elongate catheter, the tip extending distally of the distal end of the catheter, the tip comprising a soft body portion and a rigid ring distal of the soft body portion, wherein the annular wall of the tip has a thickness that decreases distally along a majority of the length of the tip and wherein the soft body portion is configured to elastically deform in response to the rigid ring contacting a distal guidewire stop.

26. (previously presented) A medical device, comprising:
an elongate catheter having a proximal end, a distal end, and an annular wall defining a lumen, wherein the transverse dimension of the lumen varies in size along a distal portion of the elongate catheter;

a tip disposed at the distal end of the elongate catheter having a first region that tapers distally and a second region distal of the first region that tapers distally more sharply than the first region;

wherein the first region comprises an amorphous polymer and the second region comprises a locally crystalline section thereof.

27. (original) The medical device of claim 26, wherein the second region is the distalmost portion of the tip.

28. (cancelled)

29. (withdrawn) The medical device of claim 26, wherein the second region is formed by reflow.

30. (withdrawn) The medical device of claim 26, further comprising a marker band distal the first region and proximal the second region.

31. (withdrawn) The medical device of claim 26, further comprising a rigid annular ring distal the first region and proximal the second region.

32. (withdrawn) The medical device of claim 31, wherein the ring comprises a polyimide.

33. (withdrawn) A method of making a catheter tip, comprising the steps of:
providing a first distal tip precursor section made from a polymer having a groove therein;
providing a marker band;
inserting the marker band into the groove; and
reflowing the polymer of the first distal tip precursor section to produce a distal tip.

34. (withdrawn) The method of claim 33, wherein the groove has a first surface opposite a second surface.

35. (withdrawn) The method of claim 34, wherein the distal tip precursor has a central longitudinal axis, and wherein a central longitudinal axis of the first surface is coaxial with the central longitudinal axis of the distal tip precursor.

36. (withdrawn) The method of claim 33, further comprising the steps of:
providing a second distal tip precursor section; and
joining the first and second distal tip precursor sections after the step of inserting the marker band.

37. (withdrawn) The method of claim 33, wherein the marker band is embedded within the distal tip after the step of reflowing the polymer.